

WHAT IS CLAIMED IS:

1. A nonreflective waveguide terminator comprising:  
a waveguide portion having a rectangular opening in a plane perpendicular to a radio-wave propagation direction, said waveguide portion having one open end in the radio-wave propagation direction and the other end closed by a terminating metal internal wall, said waveguide portion having a radio-wave propagation space surrounded by a first metal internal wall and a second metal internal wall opposite thereto which include the shorter sides of the rectangular opening and which are parallel to a radio-wave electric field, and a third metal internal wall and a fourth metal internal wall opposite thereto which include the longer sides of the rectangular opening and which are perpendicular to the radio-wave electric field; and

an electromagnetic wave absorber whose exterior shape is a parallelepiped, said electromagnetic wave absorber having a rectangular rear-end surface which is positioned at a predetermined distance from the terminating metal internal wall and parallel to the terminating metal internal wall or is provided against the terminating metal internal wall, the surface of said electromagnetic wave absorber, which has the largest rectangular area, being on one of the third metal internal wall and the fourth metal internal wall.

2. A nonreflective waveguide terminator according to claim 1, wherein:

said waveguide portion is formed by first and second divided parts which are provided along the center lines of the third metal internal wall and the fourth metal internal wall, and which are parallel to both the first metal internal wall and the second metal internal wall; and

said electromagnetic wave absorber is placed on only one of the first divided part and the second divided part.

3. A nonreflective waveguide terminator according to claim 2, wherein:

the first divided part is made of metal material;

the second divided part is made of nonmetal material having a metal-plated surface; and

said electromagnetic wave absorber is placed on the first divided part.

4. A waveguide circuit including a plurality of waveguide functional portions, the waveguide functional portions each including a nonreflective waveguide terminator comprising:

a waveguide portion having a rectangular opening in a plane perpendicular to a radio-wave propagation direction,

said waveguide portion having one open end in the radio-wave propagation direction and the other end closed by a terminating metal internal wall, said waveguide portion having a radio-wave propagation space surrounded by a first metal internal wall and a second metal internal wall opposite thereto which include the shorter sides of the rectangular opening and which are parallel to a radio-wave electric field, and a third metal internal wall and a fourth metal internal wall opposite thereto which include the longer sides of the rectangular opening and which are perpendicular to the radio-wave electric field; and

an electromagnetic wave absorber whose exterior shape is a parallelepiped, said electromagnetic wave absorber having a rectangular rear-end surface which is positioned at a predetermined distance from the terminating metal internal wall and parallel to the terminating metal internal wall or is provided against the terminating metal internal wall, the surface of said electromagnetic wave absorber, which has the largest rectangular area, being on one of the third metal internal wall and the fourth metal internal wall.

5. A waveguide circuit according to claim 4, wherein:

said waveguide portion is formed by first and second divided parts which are provided along the center lines of the third metal internal wall and the fourth metal internal

wall, and which are parallel to both the first metal internal wall and the second metal internal wall; and

said electromagnetic wave absorber is placed on only one of the first divided part and the second divided part.

6. A waveguide circuit according to claim 5, wherein:  
the first divided part is made of metal material;  
the second divided part is made of nonmetal material having a metal-plated surface; and  
said electromagnetic wave absorber is placed on the first divided part.